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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
TAYLOR, JOSHUA D	

ART UNIT	PAPER NUMBER
2426	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/915,114	LEMMONS, THOMAS	
	Examiner	Art Unit	
	JOSHUA TAYLOR	2426	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-12,15,18-25 and 30-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 4-12, 15, 18-25 and 30-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 11/24/2008 have been fully considered but they are not persuasive. Regarding claim 1, on page 10 of the arguments, Applicant submits that **"even though Schrader teaches using a channel for television programming and a channel for IP content, Schrader is silent about using a channel associated with a frequency in the range of frequencies assigned to the service channels for television programming and a channel associated with a frequency outside the range of the frequencies assigned to the service channels for IP content. More specifically, Applicant submits that neither Estipona nor Schrader, individually or in combinations, teaches the limitations as claimed in claim 1."** However, Examiner contends that Schrader does teach the limitations as claimed in claim 1. In Figure 1, Schrader discloses communications channels 110 and 118, and it was established in the previous Office Action that separate channels have different frequencies. Furthermore, in paragraph [0029], Schrader discloses that programming is sent over communications channel 110, and that IP content is sent over communications channel 118. Thus, the service channel frequency, which is a frequency which carries broadcast channels, is de facto used to carry programming, and a channel outside the range of the first frequency, i.e. outside the range assigned to the service channel, is de facto used to carry IP content.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 4-12, 15, 18-25 and 30-55 rejected under 35 U.S.C. 103(a) as being unpatentable over Estipona (Pat. No.: US 6,795,973) in view of Schrader et al. (Pub. No.: US 2002/0157101).

Regarding claim 1, Estipona discloses **a method of transmitting data, the method comprising: transmitting a video program and at least one trigger employing a first television channel operating at a first frequency** (Figs. 1 and 4, column 3, line 45 – column 4, line 28. The video and at least one trigger are transmitted in transport type A employing television service or broadcast channels). Estipona does not explicitly disclose wherein **the first frequency is within a range of frequencies assigned to service channels;** nor **transmitting enhanced television content coupled to said video program employing a second channel operating at a second frequency, wherein the second frequency is outside the range of frequencies assigned to the service channels.** However, in analogous art, Schrader does (Fig. 5, elements 512 and 514, paragraphs [0029]-[0030] and [0060]-[0061]). Schrader teaches that the enhanced television content, referred to as IP content by Schrader, can be delivered over a separate channel, and applicant discloses as prior art in Fig. 2 that separate channels have different

frequencies. Therefore, the service channel frequency, which is a frequency which carries broadcast channels, is de facto used to carry programming, and a channel outside the range of the first frequency, i.e. outside the range assigned to the service channel, is de facto used to carry IP content.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Estipona's ATVEF system to clarify the different ways in which type A and type B could be used for content transport. This would have produced predictable and desirable results, in that it would have allowed for the transmission of the video program and at least one trigger employing a first television channel operating at a first frequency and transmitting enhanced television content employing a second channel operating at a second frequency as on separate channels as desired.

In regard to claims 4, 7, 9 and 55, Estipona discloses **conforming to the ATVEF specification** (column 2, lines 49-64).

In regard to claim 5, Estipona discloses transmitting enhanced television content over a general-purpose data link or a service channel and inherently discloses that **the second channel is of smaller bandwidth that the primary or first channel** since this is admitted as prior art in the specifications, pages 2-3 and Figure 2.

In regard to claims 6, 11, 19, 24 and 44, the claimed limitation of **transmitting display channel instructions with the enhanced television content, wherein said display channel instructions indicate at least one service channel with which said enhanced television content may be associated** is met by Figs. 1 and 4, column 1, lines 40-43, and column 5, line 40 – column 6, line 11 for triggers and announcements.

In regard to claim 8, the claimed limitation of **transmitting display time instructions with the enhanced television content, wherein said display time instructions indicate at least one time at which said enhanced television content may be rendered** is met by Estipona with Figures 1 and 4 and column 1, lines 40-43 and column 3, line 54 – column 4, line 28 for triggers, announcements.

In regard to claims 10 and 12, Estipona discloses, **enhanced content may be rendered independent of a channel currently viewed by a user** and **enhanced content may be rendered independent of a channel currently viewed by a user** (column 4, lines 17-28, triggers may or may not include in the broadcast video stream, and it reveals the enhanced content may be rendered independently of the currently viewed channel).

In regard to claim 15, the claimed limitation of **removing said enhanced data from said video information to produce said video program comprising non-enhanced video information** is disclosed by Estipona (column 5, lines 40-63 and column 7, lines 5-24 as the triggers are extracted at the receiver for producing the video program comprising non-enhanced video information).

In regard to claims 18, 30, 33, 37, 52 and 53, Estipona does not disclose that the **enhanced television content is compressed prior to transmission and subsequently decompressed upon being received.** However, the examiner takes Official Notice that it is notoriously well known in the art to compress data prior to transmission and decompressing the compressed data upon being received so as to make efficient use of the system's available bandwidth. Consequently, it would have been obvious to one of

ordinary skill in the art to modify Estipona's with the aforementioned data compression for the stated advantage.

In regard to claims 20-23, 38 and 42-43, Estipona does disclose **replacing the enhanced television content with other enhanced television content;** Estipona discloses **that the enhanced television content is accessed employing a network connection;** Estipona discloses **that the other enhanced television content is accessed on a real-time basis, and discloses that the enhanced television content is stored at the headend** (column 4, line 61 – column 5, line 63 and column 6, lines 29-65 for URL locations and triggers replacements for updated or different URL locations in real time, the resource is at headend).

Claims 25, 31, 34-36, 39 and 45 are met by that discussed above for claim 1. Enhanced television content associated with the video program is accessed at the headend (resource stream 20, column 3, lines 9-24 as triggers as "enhanced television content" associated with audio/video stream at resources). Estipona does not explicitly disclose wherein **a first frequency is within a range of frequencies assigned to service channels;** nor **transmitting enhanced television content coupled to said video program employing a second channel operating at a second frequency, wherein the second frequency is outside the range of frequencies assigned to the service channels.** However, in analogous art, Schrader does (Fig. 5, elements 512 and 512, paragraph [0060], lines 1-5, paragraph [0061], lines 9-13). Schrader teaches that the enhanced television content, referred to as IP content by Schrader, can be delivered over a separate channel, and applicant discloses as prior art in Fig. 2 that separate channels

have different frequencies. Therefore, the service channel frequency, which is a frequency which carries broadcast channels, is de facto used to carry programming, and a channel outside the range of the first frequency, i.e. outside the range assigned to the service channel, is de facto used to carry IP content.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Estipona's ATVEF system to clarify the different ways in which type A and type B could be used for content transport. This would have produced predictable and desirable results, in that it would have allowed for the transmission of the video program and at least one trigger employing a first television channel operating at a first frequency and transmitting enhanced television content employing a second channel operating at a second frequency as on separate channels as desired.

In regard to claim 32, Estipona discloses that **the enhanced television content is stored at the headend** (column 3, lines 8-34 for triggers and storage medium 24).

In regard to claims 40-41 and 46-49, Estipona does not further disclose an adjustable tuner for receiving varied frequencies. However, the examiner takes Official Notice that it is notoriously well known in the art to use an adjustable tuner for receiving varied frequencies so as to take advantage of frequency division multiplexing. Consequently, it would have been obvious to one of ordinary skill in the art to modify Estipona's with an adjustable tuner for receiving varied frequencies for the stated advantage.

In regard to claims 50 and 51, Estipona discloses **storing part of the enhanced television content in allocated storage local to the receiver** (column 4, line 61 – column 5, line 17 as storage medium 24 is local to the user, not an external web server).

In regard to claim 54, the claimed limitation of a **program code is further operable to render an enhancement employing time information contained in said enhanced television content** is met by Figs. 1 and 4, and column 1, lines 40-43, and column 5, line 40 – column 6, line 11 for trigger, and announcements.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA TAYLOR whose telephone number is (571)270-3755. The examiner can normally be reached on 8am-5pm, M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Josh Taylor/
Examiner, Art Unit 2426

/VIVEK SRIVASTAVA/
Supervisory Patent Examiner, Art Unit 2426